

AMENDMENTS TO THE CLAIMS

Applicant submits below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Original) A method for implementing signaling proxy in a communication network, comprising:

configuring a proxy processing strategy in a signaling proxy; and
performing proxy processing on a received message and forwarding the message after the signaling proxy determining that the message needs to be proxy processed by the signaling proxy according to the configured strategy.

2. (Original) A method for implementing signaling proxy according to claim 1, wherein said strategy comprises:

identifying a received message which needs to be processed by the signaling proxy by one or a combination of any of VPN ID, VLAN ID, MPLS ID, IP protocol type, source IP address, source port, destination IP address, destination port of the message.

3. (Original) The method according to claim 1, wherein the method further comprises:

in the signaling proxy, setting destination address of a message to be proxy processed by the signaling proxy to be a local address.

4. (Currently amended) A method for implementing signaling proxy according to claim 2, further comprising:

when receiving a message from a proxied side, the signaling proxy determines that the message needs to be processed according to information of its destination address;

replacing destination address of the received message with a server address and source address with a server side address of the signaling proxy respectively, and forwarding the message.

5. (Original) A method for implementing signaling proxy according to claim 4, wherein after receiving a message sent from the server, the signaling proxy replaces source address of the message sent from the server with destination address of said original message sent from the signaling proxy and destination address of the message sent from the server with a proxied side address respectively, and forwards the message.

6. (Previously presented) A method for implementing signaling proxy according to claim 1, wherein said signaling proxy processing comprises:

changing source and destination IP addresses and port numbers of the received message, replacing data of the application layer, updating a signaling state and/or creating session table items.

7. (Previously presented) A method for implementing signaling proxy according to claim 1, wherein before the signaling proxy receives a message,

a forwarding strategy is configured in a network device through which a message sent by a proxied side passes, the forwarding strategy stipulating that a forwarding path of the message to be processed passes through the corresponding signaling proxy.

8. (Original) A method for implementing signaling proxy according to claim 7, wherein when the network device receives a message which is sent from the proxied side and needs to be processed, it forwards the message to the signaling proxy according to the forwarding strategy.

9. (Original) A method for implementing signaling proxy according to claim 7, wherein in the signaling proxy, information of the forwarding path of the message returned from the server is obtained in a configuration or study way and recorded; and

after the signaling proxy receives the message returned from the server, it forwards the message according to the recorded information of the forwarding path.

10. (Original) A method for implementing signaling proxy according to claim 7, wherein said network device is configured to be a default gateway of the signaling proxy, and when the signaling proxy receives the message returned by the server, it processes said message and sends the processed message to the default gateway.

11. (Original) An apparatus for implementing signaling proxy, comprising:
a unit for receiving and recognizing messages, which is configured with a proxy processing strategy, used to recognize a message which needs to be processed;
a unit for processing messages, which processes said message that needs to be processed;
and
a unit for forwarding messages, which forwards the processed message to a corresponding server.

12. (Original) The apparatus according to claim 11, wherein said proxy processing strategy comprises:
identifying a received message which needs to be processed by the signaling proxy by one or any combination of VPN ID, VLAN ID, MPLS ID, IP protocol type, source IP address, source port, destination IP address, destination port of the message.

13. (Original) An apparatus for implementing signaling proxy according to claim 11, wherein the signaling proxy processing comprises:
changing source and destination IP addresses and port numbers of the received message, replacing the data of the application layer, updating a signaling state and/or creating session table items.

14. (Original) The apparatus according to claim 13, wherein
after the signaling proxy receives the message, it replaces source address of the message with destination address of said original message sent from the proxied side and destination

address of the message sent from the server with the proxied side address respectively, and forwards the message according to the replaced addresses.

15. (New) A method for implementing signaling proxy according to claim 3, further comprising: when receiving a message from a proxied side, the signaling proxy determines that the message needs to be processed according to information of its destination

address;

replacing destination address of the received message with a server address and source address with a server side address of the signaling proxy respectively, and forwarding the message.

16. (New) A method for implementing signaling proxy according to claim 2, wherein said signaling proxy processing comprises:

changing source and destination IP addresses and port numbers of the received message, replacing data of the application layer, updating a signaling state and/or creating session table items.

17. (New) A method for implementing signaling proxy according to claim 2, wherein before the signaling proxy receives a message,

a forwarding strategy is configured in a network device through which a message sent by a proxied side passes, the forwarding strategy stipulating that a forwarding path of the message to be processed passes through the corresponding signaling proxy.

18. (New) A method for implementing signaling proxy according to claim 17, wherein when the network device receives a message which is sent from the proxied side and needs to be processed, it forwards the message to the signaling proxy according to the forwarding strategy.

19. (New) A method for implementing signaling proxy according to claim 17, wherein in the signaling proxy, information of the forwarding path of the message returned from the server is obtained in a configuration or study way and recorded; and

after the signaling proxy receives the message returned from the server, it forwards the message according to the recorded information of the forwarding path.

20. (New) A method for implementing signaling proxy according to claim 17, wherein said network device is configured to be a default gateway of the signaling proxy, and when the signaling proxy receives the message returned by the server, it processes said message and sends the processed message to the default gateway.